CLAIMS:

1-63 (cancelled).

64. (new) A method of applying a color design to a surface of a wall around obstacles like balconies, doors, windows, sills or cornices, with a movable application device having a first position measurement system configuered to measure its position relative to stationary components, further having a computer control, paint application elements and rollers or sliding elements, whereby, when the application device is moved on the surface, positions of the paint application device are measured and paint application by the paint appliction elements is controlled based on the measured position, the method comprising:

A first step, the first step including

- positioning multiple stationary components of the first position measurement system at fix positions and defining a reference coordinate system
- measure geometric properties of the wall within the reference coordinate system to generate a first data set, which is a digital representation of the geometry of the wall
- generating a second data set by assigning color data of the color design to the first data set

A second, paint applying step, the step including

applying paint alongside a region containing previously applied paint by moving the application device in a way, that the wheels do not get into contact to the previously applied paint, whereby the application device is configured such, that the array of paint applying elements protrudes laterally over the wheels,

applying paint at a position, where paint has to be applied, but due to disturbed intervisibility between the application device and a minimum required number of stationary components the first measurement system is unable to provide valid position data by

- changing the position of the paint application device to a position, where a valid

position is available from the first measurement system

- and moving the application device from that position to the position, where no valid position data was available, whereby position is calculated by the computer control based on the last valid position of the first measurement system and movement data from a second measurement system[0012], which measures a motion of the paint application device.

65. (new) A movable paint application device to applying a color design to a surface of a wall around obstacles (16, Fig. 5) like balconies, doors, windows, sills or cornices, having a first position measurement system configuered to measure its position relative to stationary components, further having a computer control, paint application elements and rollers or sliding elements, whereby, when the application device is moved on the surface, positions of the paint application device are measured and paint application by the paint appliction elements is controlled based on the measured position, characterised in,

that the array of paint applying elements is protuding laterally over the rollers or sliding elements to enable applying paint alongside a region containing previously applied paint by moving the application device in a way, that the rollers or sliding elements do not get into contact to the previously applied paint,

a second measurement system, which measures a motion of the paint application device in the case, when paint has to be applied at a position, where due to disturbed intervisibility between the application device and a minimum required number of stationary components of the first measurement system the first measurement system is unable to provide valid position data.

With best regards

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